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for the

radio amateur

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OFFICIAL JOURNAL
THE CANADIAN AMATEUR RADIO OPERATORS' ASSOCIATION
TORONTO, ONTARIO

GENERAL ELECTRIC

Radiogram

Lighthouse Larry Comments:

WHAT metal tube for your intermediate-frequency system? . . . To answer that question properly a distinction must be made between narrow and medium-band-width systems.

The former, as you know, is the type used in AM communication or home receivers, and the latter in FM receivers. (FM may not interest you now, but the time is coming when it will play an important part in ham activities.)

Selecting the right tube for either type of IF system, narrow or medium-band-width, is based on simple circuit logic. In narrow-band IF work we want as much gain as possible, but using high-g_m tubes for that purpose is apt to cause oscillation difficulties. Low-g_m tubes will "stay put"—also, will provide a greater measure of stability, which is important. (Observe that there is, after all, a definite use for low-g_m tubes!)

We nominate Type 6SK7, with two runners-up as alternate candidates—the 6SS7, which is the same tube with a low-current heater; and the 6SF7, which is a 6SK7 with a diode section added for use as the second detector. In practice, as many as three 6SK7 metal tubes may be applied in cascade with no oscillation troubles.

For medium-band-width work, lower load impedances are necessary to achieve band widths of some 150 kilocycles. This means less gain is produced; so, as an offsetting factor, high-gain (high-g_m) tubes are called for. In medium-band-width service high-g_m tubes will not cause oscillations, since grid and plate loading act as deterrents.

Two metal tubes are logical selections—6SG7 and 6AC7. The latter, however, has much the higher g_m, and takes precedence over the 6SG7 where the greatest possible gain is desired.

Generally when comparing tube types for IF work, it is helpful to apply a figure of merit. The narrow-band-width f. of m. is a tube's g_m divided by its grid-plate capacitance. The medium-band-width f. of m. is the g_m divided by the sum of input capacitance and output capacitance.

The higher the quotient, the better that tube is for the job. A brief table of characteristics for different tube types is given herewith . . . In conclusion: if there are any further facts you would like to have on metal receiving tubes for IF work, by all means write me.

Lighthouse Larry

Tube Type	G_m	Input Cap.	Output Cap.	Grid-Plate Cap.
6SS7	1930	5.5	7	.004
6SF7	1975	5.5	6	.004
6SK7	2350	6	7	.003
6SG7	4700	8.5	7	.003
6AC7	9000	11	5	.015

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EDITORIAL

. . . and now, CAROA FORUM . . .

A NUMBER of stations are rendering a useful service to members of the association by broadcasting official CAROA bulletins. These stations, while located in various sections of the country, must be supplemented by other stations in order to gain the coverage that is necessary for effective bulletin broadcasting.

Plans are being formulated for the inauguration of a programme of bulletin releases through a station system that will ensure national coverage. The Executive Committee hopes to open this programme early in March.

Bulletins on subjects of interest to CAROA members will be released regularly according to schedule. There will also be introduced something of an innovation in amateur station broadcasting by the commencement of CAROA FORUM.

The final details of Forum broadcasts have not yet been completed, but in this bulletin we can tell you something of the manner in which the Forum will be conducted.

CAROA FORUM will have two objectives:

1. Affording every member an opportunity of contributing to the formulation of CAROA policies.
2. Accumulating membership opinion-data upon which CAROA activities and representations can be based, thus permitting a full recognition of the sound democratic fundamental of pursuing a course which is dictated by majority expression.

It is a fact that, from time to time, matters may arise requiring prompt action on the part of the Executive Committee, and being of such urgency as to preclude the possibility of taking a poll of members. In such an event, comprehensive statistical data produced by CAROA FORUM will be a ready reference to which the Executive Committee may turn for membership guidance in determining the appropriate action to be taken.

The Executive Committee believes CAROA FORUM will prove a more interesting method of expressing an opinion than the usual ballot. It is believed, also, the Forum will make a better opinion possible.

A ballot provides for little more than the mere recording of a vote. CAROA FORUM, on the other hand, will make possible the expression of an opinion that is as extensive as the member cares to make it. When the association statistician has analysed the opinion, and segregated it into its component parts, Headquarters will be in possession of more comprehensive data than could ever be obtained through the medium of a ballot. The value of these results, to the work of CAROA, can readily be appreciated.

Major items of operating policy will be made Forum subjects. Each member who follows Forum broadcasts, and participating by registering his opinion, will be contributing to the establishment of current operating policies.

If the idea can be made to work effectively, your Executive Committee believes it will be an inherently better method than the more generally accepted plan of the governing body proceeding according to its own judgment, then awaiting membership reaction.

The closer operation details can be brought to the membership, the greater the interest of the member in the organization, and the greater his confidence in it.

An association such as CAROA consists of the membership. The Executive Committee is merely the focal point through which the majority opinion of membership is given effect.

Upwards of 2000 members cannot give individual attention to the details of management. They utilize the services of their mouthpiece, the Executive Committee, for that purpose.

CAROA FORUM will belong to the members but, at the same time, it will be an instrument available to the Executive Committee for discovering the trend of membership thought on important matters of operating policy. The Forum will be worthy of the participation of every member. It is being designed for the purpose of extending to each member a medium through which he may exercise his democratic right to participate in the formulation of CAROA policies.

- QVE -

Effective Dec. 9, 1947, Narrow Band Frequency Modulated Transmissions may be employed in the following bands: 3850 to 3900 Kc., 14,200 to 14,250 Kc., 28,500 to 29,000 Kc., and 51,000 to 52,500 Kc.

Inductive Feedback Crystal Oscillator

C. H. BRERETON, Ve2SF*

THE advantages of keying the crystal oscillator for break-in operation are now quite apparent to most amateurs. The saving of time and elimination of some of the congestion on our bands are reasons enough for the general adoption of the system among the CW boys. In addition, there is an added operating satisfaction to be derived from the use of break-in.

It is evident both from literature and from listening that many amateurs have trouble in keying crystal oscillators to their satisfaction and this trouble is not limited to the home-built transmitter nor, for that matter, to the amateur station.

The oscillator to be described may assist in overcoming some of this trouble. In the conventional tuned plate crystal oscillator the feedback necessary to sustain oscillation is that returned to the grid through the tube inter-electrode capacity and wiring stray capacity. The circuit of the inductive feedback oscillator shown in Fig. 1 derives its feedback from a tickler coil wound on the same form as the plate coil. The crystal is in series with the tickler grid connection.

Operation may be explained as follows. It will be noticed that the circuit is that of a Hartley oscillator (except for the crystal) and as such will oscillate if the tickler is of sufficient size and appropriately located with respect to the plate inductance and also if the capacity of the crystal holder is sufficient to permit sufficient feedback voltage to be applied to the grid, that is, of sufficiently low reactance at the operating frequency. Now, if the tickler is reduced in size or if its coupling to the plate coil is reduced, an adjustment can be readily reached at which self-excited oscillations will not be sustained but when the plate circuit is tuned to the crystal resonant frequency oscillation will be effected. At this setting the crystal reactance is very low and the feedback voltage to the grid is thus increased. It will be seen that the crystal acts as a filter unit.

This is not a new system, as oscillators of this type have been in use on low frequencies for some years. Its use was necessary at low frequencies, since crystals ground for such frequencies, being quite thick, are often difficult to adjust. They are usually quite slow on starting to oscillate and keying is often

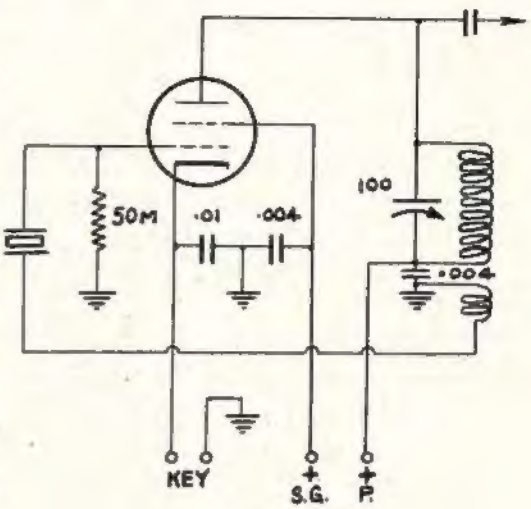

FIG. 1.

quite impossible. While the application on low frequencies has been fairly common the circuit does not seem to have been utilized on HF work. The advantages of this circuit are:

1. Very rapid keying with excellent form can be easily attained.
2. The adjustments are not critical, and even if the oscillator does self-oscillate at other frequencies it will lock to the crystal resonant frequency when the plate circuit is tuned to it.
3. The tuning characteristic is similar to the conventional oscillator in that it drops out of oscillation more quickly on the low frequency side but not nearly as abruptly as the conventional oscillator. (Fig. 2).
4. The power output is as great as that of the conventional oscillator and crystal current is usually less.
5. Output is substantially constant for almost all crystals in the same band regardless of their activity in the conventional oscillator circuit. At Ve2SF several badly chipped crystals and several fragments from shattered crystals have functioned quite well when they have refused to oscillate at all in other circuits.

Besides being careful not to have too much feedback with possible result of off-frequency

*c/o XTAL.

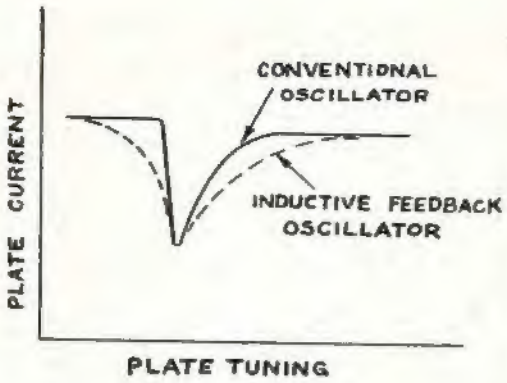

FIG. 2. RELATIVE TUNING CHARACTERISTICS

operation, the only complaint may be that if "Y" cut crystals or others with a double frequency response are used the oscillator may jump from one frequency to the other. If the circuit is used for low-frequency crystals such as 100 Kc some care is needed in tuning to be sure the response is at the fundamental frequency, since it is possible for the oscillator to function from activities at other dimensional modes of the crystal. At amateur frequencies this will cause no trouble—except as stated—since such modes are quite remote in frequency from the fundamental.

While no extensive investigation has been undertaken, sufficient experience has been accumulated to make the above claims. Satisfactory operation has been obtained for several months on two quite different transmitters. One in use at Ve4SF (the brother's station) uses only 80-meter crystals and a 6F6 tube while that at Ve2SF can use 160, 80 or 40-meter crystals by means of switching and in conjunction with a 6K6GT tube.

A practical oscillator should be centered around a pentode or tetrode with relatively low grid-plate capacity so that little capacitive feedback is encountered. This is not a must, as triodes have been used, but tickler adjustment is not quite as easy and much more feedback is required, resulting in higher crystal current. Possibly a well-shielded 802 would be best, but this has not been tested. The polarity of the tickler coil is quite important, since if reversed no oscillation can occur. The coils are wound on a 1¼ inch form with No. 20 enamelled wire. The connections, from end to end, are: Plate, B plus, ground and crystal. Spacing between B plus and ground is ⅛ inch. For 1.75 Mc, use 55 turns plate coil and 7 turns tickler; for 3.5, 26 and 5; for 7 Mc, 13 and 3 turns. With too large a tickler or one too tightly coupled there is a tendency to self-oscillation. With too small a tickler or one too loosely coupled operation will approach that of the conventional oscillator. To test for the effectiveness of the circuit, compare the keying and output with and without the tickler shorted out—retuning for best results in each case. With the tickler shorted out, the circuit reverts to the conventional type.

Tuning the oscillator is simplicity itself, since best operation is usually effected at the point of minimum plate current where output is greatest. At Ve2SF tuning is done by getting greatest grid current on following stages. Good keying form is obtained over quite a wide range of plate tuning when the feedback adjustment is correct. If the tuning meter measures plate and screen current or cathode current instead of plate current only, optimum tuning may not occur at exactly minimum reading. This is true in the case of the conventional oscillator also.

Crystal current may be measured in the usual way by inserting a pilot lamp or thermo-milliameter in series with the crystal but it is recommended that the indicating device be removed from the circuit when proper adjustment is found. This is desirable in any crystal oscillator to prevent the ill effects from the change of resistance in the lamp or the long leads and high stray capacity when a meter is used.

Another precaution also applicable to any crystal oscillator is that of supplying the screen voltage from a divider rather than from a series dropping resistor in the plate supply. This improves the screen regulation, which is more important than plate regulation, and helps prevent chirps.

It should be pointed out that the adjustment of the tickler is somewhat more critical at the higher frequencies, and while no work has been done using this circuit with 20-meter crystals, there is no reason to doubt that the application will be effective, though it is to be expected that the adjustment will require more care.

Further to news of the "Food for Britain" drive that the Ontario 75 meter phone nets have instituted, is the news that, at present writing, the fund has now been subscribed to $80.00.

A recent donation was 28 cases of canned goods which were oversubcribed in a drive for the Princess Elizabeth Fund by the School Children of Dundalk, Ontario.

CAROA FOUR-IN-ONE PARTY

STARTS: February 7 at 7 p.m. --- ENDS: February 8 at Midnight

(local times)

CAROA Certificates of Merit to Leader in Each District
Only 12 Hours of Operation to Count for Credit

An Exclusive Canadian Contest Open to ALL VE's!
'Phone and CW.

Pick Your Favourite Band and Stick With It . . . Only Operation on **ONE BAND** to count. Awards to leaders in **EACH BAND!** See how many VE's you can Work on One Band. Remember, VE's will work VE's **ONLY.**

Use the following Bands ONLY, 3, 5, 7, 14, and 28 Mc.

SPECIAL—Associate Members are Eligible for Separate Awards for Monitoring Only!

★

WE HAVE had a number of requests for an all-Canadian contest. Remember the Sweepstakes . . . the VE/W Contest . . . How could you forget them? Here is a chance for you to renew all your old friendships and make new ones and have all the thrills of a SS or a CD Party.

CAROA is going to make this first annual fixture on a yearly calendar of operating events. Elsewhere in this issue you will find the CAROA calendar of activities scheduled for 1948, at this writing. Who will be the first winners of our own first contest! Membership in CAROA is not a requisite. Tell your fellow ham friends about the contest—they are as welcome as the DX Moon!

Remember, you must select one band and operate on that band for the duration of the contest. Separate competitions will progress on each band. Join the gang and let's go to it!

RULES

Object: Each Ve will attempt to work as many other Ve operators as possible in a period not to exceed 12 hours.

Rules: Contacts must be made on **ONE Band** only—select your band and stay with it, **for the duration of the contest.**

General Call: Phone—"CAROA calling any Canadian phone station." CW—"CAROA CAROA CAROA de (your call)."

Preamble: (1) Number of contact, (2) your call, (3) RST report, (4) your location, (5) time, (6) date, (7) YES (if CAROA member), NO if not CAROA member), (8) your first name. i.e.—Hr Nr 1 Ve3CAR, 589 Toronto, Ont., 1015 pm, Feb. 7, Yes, Art.

Scoring: Count 1 point for each two-way contact. (Solid ones only to count). **Multiply the total of stations worked by number of Ve Districts worked.** (Each station may be worked ONCE ONLY).

Multipliers: Up to and including 30 watts—multiply by 3; over 30, and up to 100 watts—multiply by 2; over 100 watts—multiply score by 1.

SPECIAL FOR CAROA ASSOCIATE MEMBERS ONLY

(amateurs-to-be, not yet in possession of licenses)

Monitoring Is Permitted On Any Or All Bands.

Time Limit: Monitoring may not exceed a total of 12 hours.

Logging: List the following data: Date, call, time heard, your report of station heard (RST), call of station being worked, frequency band, first name of operator being logged.

Scoring: Count 1 point for each station heard. Multiply the total of stations heard by the number of districts listed. (Mark each district as heard).

IMPORTANT: Be sure to include the registration number found on your CAROA membership card.

Scores Must Be Forwarded to CAROA HQ.,
46 St. George St., Toronto 5, Ont., Not Later Than Feb. 21, 1948.

C A R O A
CLUB ACTIVITIES

THIS is the month we all make New Year's resolutions. Some of them kept, others broken. We intend to make one resolution regarding this column. That way, we can be sure to keep it. We resolve to report the news fairly and sincerely; to take no sides in argumentive matters. In short, make this column an interesting addition to XTAL.

We take this opportunity to sincerely thank the many Clubs who have appointed a reporter, and who have sent in the news that makes this Column possible. To those Clubs who have not, we urge you to consider the publicity that you derive by participation in this page. It is **your** page, not ours, and it is you who will lose by not participating.

We would like to point out that monthly reports should be composed of news relating to the Club's actvities **as a group.** News of the activities of individual stations should be sent to the District Representative in your province. The names of these men can be found on page 6 of XTAL for August, 1947, and on page 16 of XTAL for October, 1947.

The London Radio Club, London, Ontario, held an interesting social evening, Oct. 20th. A turkey dinner was served complete with all the trimmings. Guests were present from Clinton, Guelph, Chatham, Woodstock, Ingersoll and St. Thomas. The 175 hams present were entertained by a play depicting the life of a dyed-in-the-wool ham, entitled, "the Worm turns, or, how to get out of the dog house", played by Mrs. Earle Kimble, VE3ADC and Joe Jeffery, VE3GB. The Club is looking forward with interest to their coming election of Officers.

The St. Maurice Valley Amateur Radio Association held their annual election Oct. 5th. Following are the Officers for 1948: President, Gratien Bordeleau, VE2DD, Vice-Pres., Donat Houle, VE2QA, and Sec.-Treas., Rev. C. E. Robert, VE2EC. Directors are VE2QL, VE2OD, and VE2QJ. After the meeting the Club toured the offices of the Bell Telephone and topped the evening with a visit to the dream shack of VE2QA, where his XYL had prepared a very fine luncheon. These boys really get around! Membership totals 20, and the towns and cities represented are, Trois-Rivieres, Shawinigan, Victoriaville, Cap de Madelaine, Grande'mere, and Chaplain, Que.

The Hamilton Amateur Radio Club, Hamilton, Ontario, meets the second Thursday of each month at McMaster University and invites any visiting hams to attend. Their new executive is: Pres., Bill White, VE3BMG, Vice-Pres., Al Whetham, VE3BNQ. The office of Sec.-Treas. will call for a by-election, since the elected Secretary has been called out of town for a long period on business. Too bad business has to interfere with Ham Radio, but that is part of our code.

The Victoria Short Wave Club, Victoria, British Columbia, held their annual election of officers, Nov. 28th. The following officers were elected for 1948: Pres., D. Vaughn-Smith, VE7EP, Vice-Pres., H. R. Hough, VE7HR, Sect., O. R. Hawkins, VE7AHT, Treas., A. G. Stewart, VE7AKV. Directors, W. Mallet-Paret, VE7AM, D. Sampson, VE7AEB, Past-Pres., G. F. Green, VE7CH. The Club boasts a complete station with the call letters VE7EZ. During the year it became affiliated with the British Columbia Amateur Radio Ass'n. An oddity appearing among the correspondence at a recent meeting was an unopened letter from J3CR dated October 15th, 1032. It was a reply to some previous correspondence! The Post Office can't blame this one on the war!

The Wireless Association of Ontario is now holding its regular monthly meeting on the second Tuesday of each month in the Auditorium of the Training and Re-establishment Institute, 50 Gould St., Toronto. The meetings commence promptly at 8.15 PM, and visitors are cordially invited to attend. On Dec. 9th an interesting lecture on Electronic Induction and Dielectric Heating was given by E. J. Nugent, Heating Specialist of the Massey Harris Co. Ltd. R. A. MacDonald, Vice-Pres. of CAROA was present, and spoke on the present status of CAROA and its future aims.

Sid Prior and Bob Haslett, VE3RH, of the Toronto Amateur Radio Club, gave another in a series of talks to a church Social Meeting. Highlight of the evening was contact with various hams on 14 mc., and a plug was put in for the hams biggest headache, BCI. One Club member, Jim Gordon, VE3AVN, keeps regular skeds with VE8MB, on Cornwallis Island, in the Arctic Circle. VE8MB's XYL visits regularly to talk to her OM and is very grateful to Jim.

The Canadian National Garbon Company Ltd., donors of the handsome challenge trophy for Canadian Clubs in ARRL Field Day Competition, made the presentation to the winners, West Side Radio Club, Toronto, at a presentation dinner which they sponsored, Dec. 17th at the Mayfair Club, Queensway. This

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VHF IN CANADA

Conducted by GORDON COLEMAN, VE3ANY

LOOKING back at the year just passed, we cannot help but feel a little disappointed at the lack of confidence in VHF among Canadian amateurs. We have extolled the virtues of VHF and urged greater activity. Surely the fine record of achievement that Canadian VHF'ers have made in the past months is proof positive of the possibilities. Many of us are loathe to consider VHF in the light of what it was prior to 1939. The development of newer tubes and better techniques has outmoded our past conception of VHF. No longer does the ham in a remote district have to depend upon interesting other hams in his district in order to have qso's. DX openings have been plentiful and they will continue at even greater pace in 1948. Canadian VHF operators have contacted England and the continent as well as a great number of the American states. Coast-to-coast Canadian contacts have been made. The "swish-box" has practically disappeared from fixed-station installations. Crystal control has been universally adopted on both 6 meters and 2 meters. Beam antennas have been developed to a high degree of efficiency and gain. All in all, it has been a good year. Only one thing mars this fine record. There are not enough VE amateurs interested in VHF. The Government gave us these frequencies to use. Let's use them! Surely after two years the QRM conditions of the lower frequencies must have frayed your nerves. Take the rest cure. GO VHF! Above all let us know when you do.

It has been the policy of this column to avoid the technical aspects of VHF and to concentrate on news and encouragement of activity. This policy was taken in the hopes that others would contribute technical articles. Response has been mild. Perhaps we have taken the wrong course. We have altered this column each month so that you may choose the style you prefer. We urge all readers to review past issues and let us know what type of column you want. Please endeavour to do this now so that we can commence at once to put accepted suggestions into effect.

We received excellent reports last year, but they have been all too few. Our sincere thanks are extended to: Oscar Sandoz, VE1QZ, Harold Wise, VE7AEZ, Jack Pigou, VE7NM, Doug Allen, VE4DG, Jack Pavey, VE2KH, Elvin Veale, VE3BQL, and R. Sears, VE3AHL, for the fine job they have done in reporting regular news. They have made this column possible.

CAROA VHF MARATHON

Watch for details in February XTAL for CAROAs' VHF Marathon. Beginning March 1, competition will run until July 31.

Six meter Dx openings in Canada were as follows:

Halifax area

Oct. 28—0740-1000 hrs. - G, PAO, - good.
Oct. 29—0730-0900 hrs. - G, - fair.
Oct. 30—0700-0900 hrs. - G, PAO, - good.
Oct. 31—1250-1415 hrs. - W6, - fair.
Nov. 1—1150-1530 hrs. - W6, W7, - good.
Nov. 2—0800-0900 hrs. - G, - poor.
1125-1500 hrs. - W6, W7, VE7, - good.
Nov. 3—1120-1400 hrs. - W6, W7, KL7 - fair.
Nov. 4—0745-1315 hrs. - PAø, G, - good.
1315-1430 hrs. - W6, W7, - poor.
Nov. 5—0730-0800 hrs. - G, - good.
1045-1130 hrs. - G, - good.
Nov. 15—1150 hrs. - W7, - poor.
Nov. 16—1230-1330 hrs. - W6, - poor.

There were also openings to Europe on the mornings of: Nov. 20(p), 21(g), 23(g), 24(g), 26(p), 27(g), 28(p), 29(f), 30(f), Dec 1st(p), and to W6 on early afternoon of Nov. 23rd to W7, Nov. 23rd (good) 24(f), 25(p), 26(p), 27(f) and to VE7 on Nov 23(f) and Nov. 24th(f).

We hasten to correct the error made in last month's column, where VE3BQF was credited with the first VE-G qso. On Oct. 28th. VE1QZ worked G6X and G6IX on 50 mcs. So far VE1QZ has worked the following: 17-G's, 2-PAO's, 1-F8, 1-HB, 2-VE3's, 3-VE7's, 9-W1's, 10-W2's, 24-W3's, 15-W4's, 16-W6's, 15-W7's, 19-W8's and 8-W9's. This is an enviable record for one station.

The DX apparently skipped over VE4 land. Ve4DG reports nothing doing except local activity. The Winnipeg boys are going strong on 144 mcs.

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Introducing . . . Your D.R.

Floyd G. Gribben—Ve2XR

BACK in 1924, Floyd G. Gribben, Ve2XR, first became intrigued with the mysteries of radio when his OM brought home the family's first radio set—a De Forest one H tube receiver. From then on he spent many nights and early mornings logging broadcast stations shown in the then popular White's Radio Log.

Eventually, XR found out about the mysterious shortwaves and built his first breadboard receiver to explore the new territory. After a season or two of listening to the ham bands, he succumbed to the "ham fever" and following a period of struggle with the code he managed to pass his licence exam in 1931. Then key-clicks were heard from Ve3LR in Toronto.

His first rig used a '45 tube, continually borrowed from the B.C. set, in a TNT circuit. Because the family always wanted the tube just when he wanted to go on the air, a change had to be made, so he switched to the use of a type '50 which was far more impressive anyway, and which saw service right up to the start of the war.

Strange as it seems, XR has never operated on any bands other than 40 and 80 CW and some 160 meter phone before the war. His phone rig ran 2 watts to a 78 in the final, was featured in QST, and resulted in many of the fellows building similar rigs for local contacts.

In the years prior to the war, his construction energies were devoted to the building of receivers both for himself and others. His friends were always kidding him about having a new receiver in the shack every month or so, but when he came up with the first superhet in his end of the town, the ribbing stopped.

In 1936 he decided to try earning his bread and butter in the radio line and joined the Philco Co. where he remained until joining the CBC in Toronto in 1931. In 1941, he and the sister of Ve3XR were permanently soldered and in the following Spring his business duties moved him to Montreal where he and the XYL are now residing.

When ham radio received the green light in November 1945, he applied for his first Ve2 call. To keep things within the family he matched up calls with his brother-in-law, Ve3XR, by obtaining the call Ve2XR.

XR is a past member of the Queen City Amateur Radio Club and the Wireless Assn. of Ontario, both of Toronto. In 1937 he founded the West Side Radio Club, became its first president, and served on the executive for a number of years. At present he is an honorary member of the above organization and is a full member of the A.R.R.L. and the Montreal Amateur Radio Club and joined the forces of the CAROA as District Representative for Quebec last August.

His hobbies include the position of assistant to the xyl in stamp collecting, rag chewing via CW and building compact, low power equipment.

The apparatus now in use is in keeping with his compact, low power ideas. The rig comprises a 6J5 Pierce crystal oscillator with a bank of six crystals. These are selected by a switch and the frequency in use is directly indicated on the panel by a row of pilot lamps. The final amplifier is a 6L6-GA with a power input of 25 watts and claims for a low power record in that he now has his highest power after 16 years of ham radio! Also incorporated in the rig is a 6C5 audio oscillator which has its output fed into the receiver to monitor the keying. All this, plus the power supply and antenna tuner, is mounted in a cabinet only 9 x 9 x 10 inches! The receiver is also of compact design and is an 8 tube superhet. Standing by is a converted Marconi 11 tube Marine receiver type SMR-3A which saw service in the R.C.N. The antenna has a flat top of 132 ft. with single wire feed. In the blueprint stage is another little rig which will use a 2E26 in the final or phone or CW down to 6 meters.

C A R O A
NATIONAL REPORT

Ve1

Ron J. Hesler, Ve1KS, Sackville, N.B.—KN is rebuilding his rig again for 10 and 20 and as yet has not been able to erect his beam which is showing signs of deterioration. QK is enjoying some real dx on 10 with his thirty watts and is also getting out with his Mark 2 set. CB has something up his sleeve in the form of a 75 meter antenna; this, he claims, is the real thing and can be erected in a three-foot space! NZ is still awaiting for a holiday in order to enlist help for the final work on his imported beam; he intends to remodel his home in order to rotate the beam more conveniently. GK is still experimenting with modulation and has his rig working very good on 20 and 75. EQ will soon be heard on 75 meter fone and is now very busy erecting the necessary antennae. The Truro Amateur Radio Club have recently applied for affiliation with the Association

From Halifax comes the report of a club for YL's and XYL's of the local hams, called the Halifax Ladies' Dit and Dah Club (NO! applications from you OM's will most certainly not be honored). It was formed in 1946 for the purposes of fostering friendship among the YL's and xyl's and to also promote interest in amateur radio. Regular monthly meetings are held, which consist of code practise, business and entertainment. Social affairs with the H.A.R.C. have been held. The membership rose to about 30 and one third, at least, are interested in radio. Among those who have received their "tickets" are: Mrs. Steve Malcolm, YW; Mrs. Bill Bligh, OW; Mrs. Ron Hart, IV; Mrs. Wes. Street, YL, and Mrs. Doug. Johnson, WJ. This year the club is undertaking a goodwill mission of adopting a family in Britain. Many thanks are in order to Mrs. Sidney Johnson for passing the dope along on this.

ET lost his beam in a wind storm but is constructing another. DQ has his 10 meter beam up at last and is working f.b.—he is also thinking about a new final. KY has a ten meter beam sticking way way up in the stratosphere. LZ is building a new final. MA, LG and QY were visitors in Halifax during the month of November. AW is now operating 20 meter phone. QZ worked G6BY crossband 6-10 and PAOUN on 6. FN has a 55-foot steel tower and is thinking of a beam. EK made 87000 odd points in the CD contest. RP has 250 watts on 20 and obtained a W.A.C. using an NC173. TA is completing some mobile gear. NT is using a new Sonar NBFM exciter. He worked W9EJX, who in turn called CQ Halifax and raised DQ and told him to look for NT. NT asked for directions and arrived in the city and to the shack of DQ. There they both signed off with W9EJX and proceeded to call several G's and worked them from DQ's yard (25 watt mobile operation, whip antennas). ET won the International dx contest for Halifax and Ve1 district (QST score: 16,050 points).

IW is still a 40-40 devotee (40 meters, 40 watts) and is very proud of hooking up with Ve7ACP another 40-40 man. EW has been steadily collecting the dx cards and we venture to say that he is a champ dx man in these parts. GP has quite a shack according to a report we heard—directional beam with all the trimmings. LI is active on the bands once again. NT operates 10 meter phone mobile from his car. KT is putting up a 10 meter beam and rebuilding his entire rig from receiver on up. ES is planning to procure a NC173 receiver in the near future. KS has a new Meissner Signal Shifter in operation. LH advises that he is now completely RMEised at his shack having procured every RME receiver in addition to the DB-20 and VHF-152. LG has a new 10 meter beam in operation and says that he is getting out excellently on 20 using his 75 meter skyhook. We have just learned that former QF is to become the possessor of another Junior Operator during the early part of 1948; Ron is now a Ve6 situated at the new C.B.C. station in Lacombe, Alberta. GD is the CAROA Official District Broadcast Station for this Maritime District—specific schedules will be announced in the near future.

We regret having to announce the passing to the land of Silent Keys, Ed. Ryan, and engineer of the C.B.C. station C.B.A. and an ex Ve3. Ed was killed in a motor car accident between Sackville and Amherst on December 12 and is survived by his xyl Lorna and a son and a daughter.

Sorry gang that there was no Ve1 news in the November-December issue of XTAL, but the truth of the matter is that not one little drop of news was sent in. The success and strength of the Ve1 news depends on each and every one of YOU. The response from club secretaries has been really swell in the past and I feel certain that I can count on their continued support in the future, but what I want is to hear from the individual Ve1 who is not covered by club news. Your support will really be appreciated and will make this column bigger and better as time rolls by. By the way fellows, don't forget to drop a large self-addressed and stamped envelope to our QSL Manager FQ, you have probably a big surprise in store for yourself in the way of dx cards. 73—Ron.

Ve2

Floyd G. Gribben, Ve2XR, 5120 Westbury Ave., Montreal Phone EL 5387. Well, here we are once again and with the first news column for 1948—so let's look thru the Ve2 keyhole and see what's perking. QL of Three Rivers rebuilding phone rig and playing with the exciter on 80 CW at the same time. DL is modulating on 75 with 18 watts to a pair of 6V6G's. WK's rig went up in smoke when a HV bypass blew and is now forced to rebuild with parts salvaged. WY replaced old beam with one to stand the winds of winter. EA does his share on 75 from Sherbrooke. RD runs with ultra-midget 8 watt fone on 10. CY new Montreal call from G land. Congrats to Gordy Lynn, GL, who was elected SCM for Quebec. Give him your support and send him news for his Ve2 column in QST. Snag him on the low end of 80 or drop him a QSL, General Delivery, Longueuil. GM acquired batch of surplus xtals and grabbed big transformer so it's rumored his 20 watts is soon to pass. BO has new 20 meter beam. Welcome to a new CAROA member in the name of Guy Le Fort who signs CC on 80 CW and who proudly grins at his 16 watts making a W5. ER has no time for ham radio. When he's in town the YLs get him first. GE finally left W20 fone band and moved in with rest of Ve's. Herman Eberts of Federal Electric Mfg. Co. has volunteered for the big job of convention manager for the M.A.R.C. A.R.R.L. convention to be staged in Montreal this coming October. M.A.R.C. held FB ham gear show at November meeting. A room full of equipment was brought in by the contestants and BU, EM and OG did a swell job as judges with SA doing likewise on supervision of exhibits. Those taking the first three honors were Herman Eberts (ham to be) NN and UW. XR missed out due to delinquent dues! AR, CX, LR, WP, WS all new voices on ten. PK and JJ neck and neck in race to see who works most ZLs on ten fone. KS works 'em before eight these mornings on 20 CW. AX finds powers of Hampstead raising Cain over him raising beam. Birds and dogs still holding pole until decision is made.

Don McVicar signing WW another new CAROA member who pilots for World-Wide Aviation out of Mtl says his three V beams near La Prairie got him 63 countries in six weeks with 90 watts. BR has new VFO and toying with five watt phone for local gabs on 10. (More of these should be used for the same purpose to help cut down the QRM) QS finally snagged his first ZL on 28 Mc fone. DU is back at his rag-chewing on 75 with 100 watts to a pair of 814s. HL has new 75 meter doublet 50 ft. high. Beef Dept.—Which one of the new local 10 phones gums the works with a screeching VFO and has many of the boys dreaming of sawed-off shotguns? In case you still don't know the NBFM allocations after all this time, here they are. 3850-3900, 14,200-14,250, 28,500-29,000. Louie the Lid sez—"Can I use AM in the PM and does it matter whether it's Daylight or Standard time?" Well, there you have it gang. If you were not mentioned in the news this time it's because I do not know about your activities. Let's remedy the situation. You as a member

deserve a voice in this magazine so why not take advantage of your privilege by dropping me a line or calling me on the phone. All the dope on my whereabouts appears at the top of this column so what say OMs? Let's hear from you will you? See you around these parts next month. Don't forget to renew your license during the coming month! 75 Floyd

Ve3

R. C. Hunt, Ve3WX, DR, Ontario. NI is back on after a long lay off—APM wants to know how CJ managed to get three deers and a bear on a recent hunting trip—NX is on with a new rig using P.P. 250 T's and a new radio room. CI is with a 304 TL. Both Mr. and Mrs. DD are doing a fine job on the Ontario Fone Net and Nell is also doing an extra good job on the Food for Britain Fund. AHP as well as a cash donation had cards printed for advertising in radio stores. LU interested in six meters and working out fine. ADC represents London on the OFN. AGB is racing against the weather in trying to get his beam erected. AQB managed to get his beam operating before going to hospital with a fractured foot. AWJ is back on with new rig and higher power. TM is looking for a Windsor station to handle CW tfc (still). QB recently appointed OPS and OBS. AHL has two meter mobile rig going. LA is now an engineer with CKLW. UA gets on the OFN when not looking after the municipal affairs of Fort William. AIU has 98 countries on 10. AES skeds his brother every Sunday. AIV rebuilding to higher power after a trip out West. AUN is on 10 and FB reports FP is awaiting the opening of 75 for NBFM.

Ve5

Bill Gordon, Ve5MW, DR, Saskatchewan.—5GA had a rectifier tube short out and burnt up his D104 mike and a transformer in his speech amplifier. 5DK at Weyburn has made the 75 meter phone band. 5CM of Regina had no floor in his shack, no heat and no modulation percentage indicator. Now Art has nice new percentage indicator, has nice new floor in the shack (no second-hand lumber either), and an electric fan to blow heat into the shack from the furnace. Last time we QSO'd Art he was busy winding a 2000-volt plate xformer for 5GA's son, Roy, who, by the way, is bringing out the sweat on his brow working for his ticket. 5CP may have permanent QTH in Regina. He's tall, dark, handsome, 19 years old, and an eligible bachelor, Regina YL's, so get ur pucker paint on straight, gals. 5FA at Nokomis was caught making little chairs with round holes in them, so he had to make a speaker baffle box for 5GA. The box had a round hole in it too. The skunk net has been ribbing Gordie about the articles he makes with round holes in 'em. Wonder if he builds houses too!? Little ones, that is. The A.R.R.L. Trunk Line I is operating Winnipeg West through to Vancouver with 5KJ representing Saskatchewan. Stuart has given up curling for TL "I." Stu also tells us that he was out three days but never even saw a live deer, let alone shoot one. By the way, a few lil birdies tell us that 5RB is deer-hunting too. (The year round). That's all for this time, fellas. 73 and best of the New Year to you. Bill.

TFC: 5KJ-19; 5MW-11.

Ve6

W. R. Savage, Ve6EO, 329-15th St. N., Lethbridge, Alta. 6GJ is pounding brass on 80 meters with a nice signal. 6HP says his plant runs out of gasoline while in a QSO, and was his face red. 6EL says he will be very busy now until Xmas, probably is going to get the xyl a nice fur coat for Xmas, Hi. 6SL is on 80 CW now; we would like to know how he can build equipment now, like he did on 75 fone. Hi Johnny. 6AY is doing some experimenting with FM. 6WZ says he grows some nice ducks and geese around Barons so keep that in mind fellows for next season. 6HB is going to make his receiver just tune the bam bands. 6LA is going to install flourescent lighting, then we expect his next move will be to install radio interference eliminators on them. 6DR is heard again, and is working skeds for the general public. FB Doc. 6VN is going to rebuild his transmitter. 6OT is putting out a nice signal with 18 watts. 6NF has a new rig on the air but has to tighten up a choke to dispose of the hum. 6PP is planning a trip south in the near future. 6MJ is sure building up a deluxe model of a rotary beam with indicator, etc. 6OA is going to put stop switches on his beam so he won't wind his feeders around the pole. 6MA is active on 75-20-10 and is doing fine. 6XX cleans up some troubles in his fone rig and is putting out a FB sig. 6HZ is sure burning the midnight oil on 75 meters now. 6SR has been busy on 10 and 20 but is up on 75 now and going big guns. 6OD also does some photography for a side line to break the monotony of ham radio. 6ML has moved his QTH to Lethbridge and should be on the air soon. 6DN is looking for a 7¾ hat. We understand he uses it to put weights in to adjust the brush tension on his generator. 6KI has moved to Westlock and has his rig set up. 6AO, 6GD and 6TM must be taking a holiday because the QSL's are slowing up. What's the trouble fellows. 6AL must be going in for hi-power; let us in on the dope, Spence. 6AF is never heard on, he must be working his dx after midnight. 6EO is busy with a new over-modulation indicator. 6BC is leaving Lethbridge for a while. He also got a nasty burn on his hand from high voltage. Have to be more careful, Bernard. 6IP gets his UAO card and is happy now. 6MP is back on 75; what happened Maud, you must have worked all the dx on 10 now. 6KA is got a very nice note on 80 CW; nice going Don. 6ZW is back from the North. 6AZ sends in an envelope for his dx cards and gets some. There are a lot ore cards on file here fellows, so don't be afraid to send in your envelopes for them. Well, there were no reports sent in this month OM's. What's the trouble, are you getting bashful and don't like your call in the column. Darn it, I told a fib. I did get word 6MP who said she had a QSO with ex6RH and he is going fine and getting organized in the Ve3 district. FB Roy. We also had word from 6LQ stating he has erected a plumbers delight (beam ant.) and it works FB. He also reports 6JG as being on 75 fone. 6CW Archie Campbell, a new ham on the air. 6PP will soon be known as the wondering visitor the way he gets around, and he has promised a visit to yours truly; the welcome mat is out OM. 6FB is the new call of ex4ACQ. 6SZ works a sked for the round the

QSY to page 24

Calendar of CAROA Operating Events 1948

Feb. 7- 8—CAROA Four-In-One Party.

Mar. 6- 8—Ve/W Contest.

May 29-30—CAROA Low-Power Derby.

June 12-13—Canadian National Carbon Co. Trophy for Ve Clubs in ARRL Field Day.

» QVE «

NEW CONTEST

MARK March 6 - 8 on your calendar. It's the Ve/W Contest! We've moved it ahead from Easter weekend at your request. Details about new Certificates and CAROA Trophy next issue. Watch for it!

CLUBS from page 8

fine trophy can be won by any Club in Canada participating in the Field Day. The West Side Club served notice that they will provide strong competition to any Clubs trying to wrest the title from them in 1948.

The Loyalist City Amateur Radio Club, St. John, N.B., held a rag-chew night, Oct. 27th, at which Fred White, VE1FL gave an interesting talk and demonstration of a 50 mc. rig. A number of interested SWL's attended the meeting. At their meeting held, Nov. 10th, a record entitled "Broadcast Interference" made by Alex Reid, VE2BE and VE2SA was played for the benefit of those hams who missed the speech over the C.B.C. network last year. The officers for 1949 are: Pres., J. M. Redding, VE1IZ, Vice-Pres., M. W. Doull, VE1EE, Sect., Iris White, VE1AYL, Treas., R. W. Staples, VE1IW, and directors VE1RQ, VE1JO and VE1FC.

The University of British Columbia Amateur Radio Association who are the sponsors of a laudable movement designed to bring a number of the Universities across Canada together on the air, and have set up the following schedule of operating times:—

Monday, Wednesday and Friday. 14.30 P.S.T. on 7256 Kc. 15.30 P.S.T. on 14,080 Kc. They propose to call CQ VEU at these times and on these frequencies, and are anxious to establish contact with other interested Universities in Canada for the purpose of exchanging campus news of mutual interest. It is not necessary for the University itself to have a station, but if an active ham student attending the University will contact them for this exchange, they could arrange skeds accordingly. This is a very commendable move, and we will be anxiously awaiting news of results. So far their only skeds have been with the University of New Brunswick. What say Alma Maters? See page 9 of XTAL for September, 1947, for more dope.

Total Montreal Amateur Radio Club collections to date amount to $109.21. Twenty-three parcels have been sent overseas for "Food for G's."

Approximately 75 hams and their XYL's attended the annual fall banquet of the Winnipeg Amateur Radio Club, which was held November 18th, under the able chairmanship of Doug. Allen, VE4DG. The November meeting of W.A.R.C. was well attended by members and out-of-town visitors, and an interesting and enlightening lecture entitled "Ionisphere and its effects on Radio Communication" was given by Harold Ferris, VE4HF, Radio Division, TCA. The Club have set up a committee to provide instructors to work in conjunction with the R.C.M.P., in a drive to curb juvenile delinquency by stimulating an interest in radio and other hobbies. The Club has purchased a Micro-Match and is circulating it amongst its members.

The Clinton Amateur Radio Club, Clinton, Ont., resumed activities Monday, Dec. 1st. New Executive elected were:—President, Alex Vellman, VE3BTQ, (ex VE8AG) Vice-Pres., Ed Saunders, VE3BNF, Sec.-Treas., Red Ultican, VE3BHO. The Club station, VE3BER, has been rejuvenated and will be on the air regularly.

That's all for this month. The Column is growing, by leaps and bounds. We would appreciate your comments on the manner in which we should present this news.

—•—

Important news on page 6—Read all about the new CAROA FORUM!

See page 7 this issue and get set for a week-end of fun!

DX'ers of THE MONTH

Ve7HC

85!

Call	Nov.	PW
Ve7HC	85	131
3LZ	55	82
4RO	54	147
2WW	47	63
3BBZ	43	60
7EH	35	75
1AQ	28	59
3BFK	24	64
3BBY	21	36
6FK	20	35
3TB	20	35
3AJS	18	49

Prefixes of the Month

Ve7HC—OK, UA1, OZ, GM, ON, VE, UD6, 16, CR7, UG6, VQ2, UC2G, VS9, GD, EK, VQ4, XAFQ (Triest) CN, FA, VP9, GW, SM, CM, LU1ZA (South Orkney Islands), HK, UH8, ZS, HC, VO, EL, I, EA, CT, VK, KA, VS2, W, HB, YU, KZ, PY, TI, ZE, FQ3, F, J9, J, J8, C, VS6, CR9, VS4, KP6, T1NS (Libia), UB5, SU, OH, HS, UA9, VQ8, XZ, D, VU, ZL, LU, UR2, ZD1, CE, EI, GI, U18 . . . 3LZ—ON, W, G, VE, SM, VK, F, UA, EP, ZC6, VR5, LU, CE, ZL, OH, PAo, I1, ZS, KG6, OZ, VO, KL7, KH6, LA, ZD4, FA, OK, J, GM2, TI, XE, CM, D, UD, UQ, UAo, VP9, OA4, UB5, KZ5, KP4, TF3, HC1, OX3, YR5, LB9, GW8, EI9, PY1, CT1, CP1, GD2, HB9, G15 . . . 4RO—YR, UD, D4, OK, EI, ZC1, UA1, UH, KZ, OH, LA, HB, ZB1, OZ, EP, HZ, KL, J2, YI, CM, UB, ZS, LU, TI, ZL, OA, F8, VO, VK, LX, W, CE, VE, OX, CX, KH, XE, G, VP9, SM, KP4, HK, KG, PAo, VP6, HS, VS6, ON, UN, TF, GW, GM, GI, . . . 2WW—ZM6, VK, OH, UD6, UAo, OX, CE, KZ5, EI, UC2, I, EK, UA3, G8, YU, KA, CN8, LA, LX, UA9, OK, YR, SV, SM, VP5, D4, GI, KV4, PY, ON, UA6, HA, GM, HC1, UR2, UG6, F, CO, UA1 (Franz Joseph Land), PAo, UB5, ZL, TI, VR5, UQ2, OZ, KH6 . . . 3BBZ—LA, G, F, I, PAo, ZS, GM, CO, TG, PZ, HK, VP6, PY, LU, KV, ZL, VP, XE, OQ, GW, HB, ON, ZS, VO, YV, OA, LX, D4, OZ, VK, VP4, J2, TI, HR, CX, SM, CN, J9, HP, CE, GC, HC, HH . . . 7EH—C, CE, CM, CR9, D, EI, F, G, GI, GM, GW, HB, I, J9, KG6, KH6, KL7, KP4, KZ5, LA, LU, OH, OK, ON, OZ, PA, PY, SM, UA3, UG6, VK, YU, ZE, ZL, ZS . . . 1AQ—CM, CN8, D, F, FA8, G, GD, GI, I, I6 (Eritrea), KV4, KZ5, LU, NY4, ON, OZ, PAo, PY, TI, UA1, UR2, VE, VK, VO, VP9, W, YU . . . 3BFK –LA, PA, GM, ZL, OZ, ZC, SM, G, I, VP3, LU, LZ, VK, PZ, XE, OQ, F, HB, VO, GW, OH, GC, ZS, VU . . . 3BBY—OZ9, G4, LA3, GM6, HB9, F8, OH2, XE, ZS2, FA8, GI3, UA3, OK1, LX1, KS4, GW8, SM5, VQ4, UAo, HA1 (QSL via W2IOP) . . . 6FK—PAo, MB9, G8, XE, OX, KA, TI, J2, TG, W6/KG6, I, YV, LU, KL, LX, ET, GI, EI, KP4.

MORE than a few champions took a pasting in the merry month of November! Two of 'em managed to eke out a victory, but 4RO wasn't as fortunate as the Argonauts or Joe Louis . . . his measure was taken twice . . . first by 7HC with 87 countries and Joe Goodier returned to the fold to drop into the second notch with 3LZ for a total of 55. George was a bang-up third with 54 . . . Nobody seems to bother counting Canada and U.S. as a country worked! . . . We do . . . 3LZ uses a centre-fed zepp and 225 watts . . . he says he wasted twenty cigarettes and other things in 3 hours while he called SU1SS who was coming through the band offered only a few UA's . . . Joe says he covered three divisions on the S-20 dial and was calling everything and CQ too . . . but getting nowhere! LET US HAVE THE FREQUENCIES OF THE SPICEY ONES GANG! !. . . We learn from two different sources that phoney 3AV has been testing on 14,175 Kc . . . signal characteristics would indicate that he is not in Ve3 district . . . Have an ear fellows . . . Dandy letter from 6FK with his first report . . . he lists frequencies of MB9AI (14,380) — LX1BG (14,360) — ET3AD (14,305) . . . MB9AI is operated by two RAF hams and runs 50 watts to a 3 element rotary array in Southern Austria . . . QSL via RSGB . . . ET3AD may be QSLed to PB 145 Addis Ababa . . . SORRY WE HAD TO GO TO PRESS BEFORE REPORTS WERE RECEIVED . . . You will note that we combined NOV.-DEC. XTAL, and further that you received it before Christmas . . . January will be on time and we are doing our utmost to hold it to this regular schedule . . . In future, as we said before, in September issue, PLEASE MAIL ALL REPORTS INTO HQ BY THE FIRST OF EACH MONTH . . . this will give you a chance to compile your list on the last day of each month and mail it the following morning . . . PLEASE!

DEAR OM

XTAL assumes no responsibility for statements made herein by its correspondents.

Editor XTAL:

Your editorial in the November-December issue inspired this brief missive from one of the great family of CAROA members.

You have hit the nail right on the head when you mention that it is not XTAL's function to duplicate the work of other ham mags. From my viewpoint, what I like to see is news of Canadian activities or—most important—general news slanted to a Canadian angle.

For instance, two things crop up in my mind that I would like to see in the book. The first is full coverage of all the War Assets equipment available to Canucks as well as details of conversion. XTAL should have pre-dope on any new releases to be made to retailers of War Assets equipment. For instance, there was an ad in the daily press a few weeks ago about radio transformers and chokes to be placed on the market by War Assets Corp. XTAL should have the dope on this sort of thing first, with a technical description of the material.

The second is the matter of importation of radio equipment from the United States under Mr. Abbott's new austerity code. That would make a most acceptable article. What can we buy in the United States in the way of transmitting and receiving equipment? How do we go about getting a special permit to buy stuff that is not manufactured in Canada?

All this information could be dug up from the federal government, and I am sure the fraternity would just eat it up.

But the main thing—I think—to combat is the lethargy of the members from coast to coast. If they would only sit down when something of interest happens in their community to do with ham radio and send it in to HQ, you would be able to sit back and the mag would practically write itself.

For instance, last week we carried a story about a ham in Waterloo who claimed in court that he didn't need a license for broadcast reception on his short-wave receiver because his ham license covered it. The department of transport are to be consulted before the judge can give a verdict. That's hot spot news. Would like to see the whole story together with pix of the station and the verdict in the next issue. (The ham was required to purchase a BC license.—Ed.)

Mind you, I am just thinking out loud, but some of the thoughts may be useful. I am night editor on the Canadian Press radio station wires coast to coast. So I have available material of CP, Reuters, and AP. I will be mighty glad to make up a file of material that may happen through on radio in general and ham radio in particular and let you have it every week. This stuff might be of some use for you to write follow-up stories with a Canadian angle.

Also—being an old white-whiskered one—I am interested in OT activities. We should run the biography of some old pioneer in Canadian radio once in awhile. For instance—the late Ted Rogers (of Rogers Radio), the only man to get across to Scotland on the first transatlantic tests on spark (5kw from Pickering College, Newmarket). I can give you from my log any dope on the old days and several mighty fine human interest angles.

Well there we are, Eddy; and I hope you don't think I am shoving my big nose too far into the matter by mentioning all these things, but I am a one-hundred per cent booster for CAROA and XTAL and think you have a great future.

GORDON McCLAIN,
Ve3GE (20-40 & 80 cw).

Baring, Sask., Dec. 22, 1947.

Editor, XTAL:

In my opinion XTAL will never become the magazine it could be till it has more to offer in the way of technical articles. I realise that XTAL is merely the organ of a society which exists mainly for the furtherance of amateur going to the dogs as far as the technical side of amateur radio is concerned. Very few of us ever duplicate a piece of equipment exactly as it was described in an article. However, most articles contain a germ of an idea of some sort that we will sometime find useful. Therefore I think that as many different technical subjects as possible should be covered in the pages of XTAL.

VHF—from page 9

Vancouver Area

Nov. 2—0930-1130—Ve1, good.
22—0900-1000—Ve1, fair.
28—1000-1130—Ve1, W1, W2, W3, good.
24—A.M. -W1, poor

On Nov. 8 Ve7AEZ was heard by W7FS/mm at 36-16 N. Lat.-67/05 W. Long. which is about 400 miles out of New York City. Ve7AHZ, Ve7BQ and Ve7DU worked Ve1QZ for the first trans-Canada 50 mc QSO. We hope!

Ve2 openings have been scarce, except for Oct. 31 when Ve2KH worked G5BY, crossband 6 to 10

Ontario Area

Oct 31 1200-1430—G, W6, W7, W8, KL7, Ve7, good.
Nov 20—1040-1140—G, PAO, W2, W3, fair
22 1015-1035—G, PAO, fair.
1210-1300 W6, W7, fair
Dec. 11—2130-2200—W4, poor.

Ve3BQL worked Ve7DU on Oct. 31 Ve3AXT worked G5BY, Nov. 22 Ve3ANY worked G5BY, Nov 20 and G6LK, G2BMZ, Nov 23.

The recent dx openings on 50 mcs have made some welcome changes in the dx derby. Prospects look good for Canadian 50 mc WAS in 1948

News of activity on bands higher than 50 mcs is nil!

DX records stand as of last month. It appears impossible to beat the 10,500 mile QSO of CE1AH and J9AAO We can do better than we have on the other VHF bands, so what say?

6 METER DX DERBY

CALL	DX QSO's	STATES	OTHER
Ve7AEZ	159	38	
Ve1QZ	142	24	G, PAO, F8, HB, Ve3, Ve1
Ve7VY	86	20	
Ve7AHZ	78	17	Ve1
Ve7NM	60	14	
Ve3ANY	59	27	G
Ve3AZV	52	16	
Ve7BQ	35	7	Ve1
Ve3AXM	26	16	
Ve3AIB	20	11	
Ve7DU	19	3	Ve1, Ve3
Ve3KM	18	10	Ve1
Ve3AXT	18	9	G
Ve3BFF	17	10	
Ve4YW	16	9	
Ve3NH	12	7	
Ve4GQ	10	7	

6 METER DX DERBY WINNER 1947
Renewal of this Feature January 1, 1948

A suitable award will be made to the winner of 1947's 50 Mc DX Derby as soon as score checking is completed. In order to qualify, your score must reach CAROA HQ on or before February 1, 1948. Be sure you include times and dates of contacts up until midnight December 31, 1947.

Renewal of the Derby started on January 1, 1948, at 00.01 hours. Let us hear from more 6 meter stations in 1948 and by all means watch for the new VHF Marathon to be storied in detail in February XTAL.

Dear OM from page 15

radio as a whole and not for the purpose of disseminating technical information, however, the general consensus of opinion out here as far as I am able to find out is that XTAL is

QSY to page 21

DEAR OM from page 18

I think that the need for more technical articles should be stressed more strongly in the pages of XTAL. Perhaps a contest of some sort could be arranged to liven up interest in the matter. I know for a fact that a lot of kicking has been going on at the lack of technical 'meat' in XTAL, and a few of the boys say that they will not continue to subscribe to the magazine unless more dope is put in it suitable for the man who likes to roll his own. If some sort of a drive was put on for more technical (that word again) articles from the members, it would give the kickers a chance to contribute or shut up.

I cannot help but reiterate my former pleas for more information suitable for the ham who has to roll his own power supply. Without any malice in the though, OM, I'd like to see some of the gang in Toronto have to go out into sub-zero weather and start an engine before the rig could go on the air. That's the situation here at present.

Well, I think I've sounded off enough for this time, and I hope the above remarks will be taken in the spirit with which they were made. Here's wishing the gang at St. George St. all the best for the Christmas season, and a happy and prosperous New Year.

Best regards OM.

ED. PUGH, 5AP.

CANADIAN ARRL

Proficiency Awards

W1AW Code Runs

—•—

October 17, 1947

	WPM
William Welch, Ve3BCS	25
George D. Parry, Ve3BMI	15
V. L. Robbins, Ve3BCH	20
W. A. Taylor, Ve3AN	20
E. V. Penny, Ve7AIZ	30
Fred M. Longstaff, Ve3APK	15
Frank A. Ford, Ve3AKO	15
Bob Gauvreau, Ve7CE	20
C. E. Lloyd, Ve3DD	35

November 12, 1947

	WPM Certificate
Albert E. Altherr, Ve2GM	20
B. E. Franklin, Ve2GN	25
M. A. Seebach, Ve5MS	15
H. G. Kilpatrick	20
J. H. Stone, Ve3BCP	25
E. C. Mercer, Ve3ASX	20
Dawson Hoadley, Ve3ANY	15
Charles Nurnberg, Ve3AYM	15
J. R. McKenna, Ve3BOQ	15
Bliss Manship	15

	Endorsement
E. V. Penny, Ve7AIZ	35
J. Stewart Houston, Ve5KJ	25
George D. Parry, Ve3BMI	20

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NATIONAL—from page 11

world fliers, Truman and Evans. 6MJ got a motor for his beam but he is waiting for someone to dig the hole for the pole. 6EA has BCI trouble. 5RZ is working in Edmonton on radio equipment. 6HM is new assistant CGM for A.R.R.L. 6EH is new activities manager for N.A.R.C. 6LQ says he is W.A.C. three times now but does not say on what bands. 6PE is running a pair of 807's on 80 as 40. 6WS sold his shack so is QRL till he gets new QTH. 6ED is working 10 CW. 6AH promises to be on the air soon now. 6BP still maintains 40 meters is a man's band. Well, that is it for this month fellows, but don't forget next month, we need some more, so 73 for now.

Ve7

E. Savage, Ve7FB, DR, B.C.—Clubs are getting ready for a good winter of activity. Collingwood Club reports that it is growing bigger every meeting. AJP building new rig and repairing beam. AME has VFO to battle QRM on 40. Or is it a "swish" box Doug.! KK says antenna won't take increased power to his 807. YY has worked so many down under he talks and looks like a digger. AKW on 10 and 20 VFO control. BE planning fone. LF on 40 with an 814 and a new VFO from a TU. XJ on 20 CW with beam proves his dx with QSL's. ABP has cathode follower VFO on 40. ADV working on new pole with help of stone gang—what a hole! Let us in on the dx secret AZ. AGP using 19 set. AR—how about some news? AFT EX ŁAER EX 3AGY on 10 with 5 watts to 6F6 and works dx. LK's brother now has ticket—Congrats! ALK predicts 20M QRM or do we? AFN has trimmed his moustache. "President" ALQ has no rig as yet but likes PA's. TE enlisting members. Nice job on CW-RF. FB wonders about this VFO "ITTS." CB has all the answers or excuses. AAZ tries cathode modulation. BY and SF have BCI. BK has terrific wallop for low power. LC is up to 20 watts. BJ sure controls the five o'clock net—hard work but well done Ed. PO is now home. Say, fellows, who is it that puts carriers on our bands by the hour? Could it be you know? 73 Gang. Ern.

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